

MISSOURI CONSERVATIONIST

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Serving Nature & You



Vantage Point

Planting for Conservation

“Acts of creation are ordinarily reserved for gods and poets. To plant a pine, one need only own a shovel.”

—Aldo Leopold

Tree planting season is here! Most foresters are like me and can hardly contain their excitement when they get their first peek at a tree seedling catalogue and start thinking about the opportunity to celebrate the tree planting season. That's right, celebrate! After all, Arbor Day is known as the “Tree Planter's Holiday.”

My first experience with tree planting began in 1974 when my dad bought a small parcel of land in Howell County. Shortly after building a house and moving in, he came home one spring day with about 100 shortleaf pine seedlings in a bundle of brown paper stamped “George O. White State Forest Nursery.” It seems these trees had been provided to the local vocational agriculture teacher for conservation projects in the area. My dad, also a school teacher, was more than willing to capitalize on the opportunity to green-up his recently acquired property.

So my sisters and I headed to an old field with Dad taking along the trees, shovels, pry bars and buckets to plant those trees in our rocky Ozark soil. After a long afternoon, a few sore muscles and a tiny bit of teenage whining, we finished the task and felt proud to see those little green sprigs of pine needles sticking up above the grass. I still feel proud every time I go to the family farm and walk past those towering pine trees now reaching heights of nearly 50 feet and whispering gently in the wind as if to say thank you for planting them.

Did you know that 33 years later, the Department's George O. White State Forest Nursery still provides trees to Missouri landowners and residents for conservation projects? The nursery has been in operation for 60 years and now produces roughly 5 million tree and shrub seedlings annually. These trees provide Missourians with a source of diverse plants for many conservation practices, such as forest restoration, wildlife food and cover establishment, windbreaks, stream bank stabilization and soil protection.

This year the nursery is offering roughly 60 different species of trees and shrubs intended to allow landowners broad opportunities to enhance wildlife habitat and beautify their property with sometimes hard-to-find Missouri native species. In addition, residents can purchase special seedling bundles designed for specific purposes, like the Wildlife Cover Bundle, Conservation



Bundle, Nut Tree Bundle or the Quail Cover Bundle. The nursery will be accepting orders until the end of April with a minimum order of one bundle containing 25 trees or shrubs.

Besides providing trees for public use, the state forest nursery is an integral part of the Department's management of Conservation Areas and implementation of priority programs. Each year the nursery staff works closely with resource managers to grow trees and other plants for specific habitat projects and programs, like the Department's current quail and grassland bird initiative or bottomland hardwood restoration emphasis areas. Working together, the Department's staff creates a win-win situation for wildlife by enhancing their habitat while “planting” for the future of conservation.

Now is the time to start planning your own tree planting project. Remember, trees not only enhance habitat for many species of wildlife, they also clean the air through carbon sequestration, provide clean water by controlling erosion, reduce energy bills by breaking the wind and shading our homes, provide diverse wood products to support our quality of life, beautify our homes and increase their market value, and make the world a much more tranquil place to live. So why not plant a tree and change the world!

Lisa Allen, forestry division chief

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Reflections

A DEER PRICE

First of all, I'd like to tell you that the *Missouri Conservationist* is a great resource for hunters and the general public alike. Many members of my family, both hunters and non-hunters, really appreciate the magazine for its informative topics and great pictures.

The December 2006 issue pointed out a topic that I wasn't personally aware of myself. In the "Agent Notebook" he noted that processed deer meat must be collected by May 1st. Although I've always been so anxious to get my own processed meat back and usually have it picked up within two days of the phone call saying it's ready, I can see how this could be a big burden to local processors. Though something may be able to be done with the meat itself,

those hunters should still be punished or fined for their actions. The fines and punishment help to discourage these things from happening.

I think it's very helpful for you to mention this kind of thing in the "Agent Notebook" and other areas of the magazine. I think it will help point out things that most of us should know but might not necessarily be aware of. It might be little things here or there, but if it's something that helps the promotion of Missouri conservation, then I think it helps us all.

Rodney Boatright, via Internet

Editor's note: According to Agent Jim Taylor, agents do ticket violators, and the cost can be as much as the processing fee.

NO SWAN SONG HERE

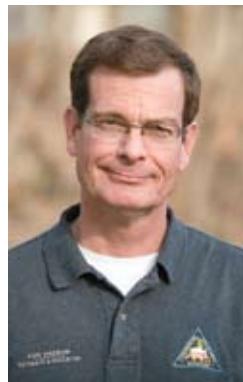
A day or so after seeing the beautiful photo of trumpeter swans on the back cover of the December 2006 issue, I had the opportunity to see several of the group of about 60 swans that was spending the last part of December at Riverlands, near Lock and Dam 26 in St. Charles County. My understanding is that they are part of an effort to reestablish the species along the Mississippi flyway.

Ed Schmidt, Richmond Heights

Editor's note: Following decades of restoration work by state and federal wildlife management agencies, about 1,000 trumpeter swans once again migrate between the upper Midwest and the lower Mississippi River Valley.

The letters printed here reflect readers' opinions about the Conservationist and its contents. Space limitations prevent us from printing all letters, but we welcome signed comments from our readers. Letters may be edited for length and clarity.

Ask the Ombudsman



Q: Where do the finches, titmice and juncos live at night during the winter? We never see any nests in the trees after the leaves fall. We live on a lake and there is a martin house available to them, but it never seems to have any activity during the winter.

A: The martin house probably

of the open surroundings. I spoke with our bird expert and he says the titmice congregate in natural cavities, several to a hole. The other two species get out of the elements in bramble patches, cedar thickets, etc.

This time of year heavy cover is crucial for birds. It's not unusual for hundreds of birds to roost together in cedars where they're protected from the wind and cold.

Snow cover usually isn't too much of a concern, as south-

facing slopes generally open up quickly. Prolonged snow cover may cause difficulties for some species.

Bird feeding in the winter is something many Missourians enjoy. However, there are a lot of things we can do during the rest of the year that will help birds survive the cold months. Special plantings like deciduous holly, sumac, etc. will provide natural food. Cover can be developed by planting cedar, plum and other thick-growing plants. For details on providing for backyard wildlife please see www.missouriconservation.org/landown/backyard.htm or ask for publications on this topic.

The Department's seedling program provides Missouri property owners with a variety of plants that will help birds and other wildlife all year long. Plants are nominally priced. Order information can be found online at www.missouriconservation.org/forest/nursery/seedling or contact your local conservation office for the printed version (See page 1 for a list of regional office phone numbers). For a recorded message concerning possible shipping delays and the kinds of trees still available, call 800/392-3111.

Ombudsman Ken Drenon will respond to your questions, suggestions or complaints concerning Conservation Department programs. Write him at P.O. Box 180, Jefferson City, MO 65102-0180, call him at 573/522-4115, ext. 3848, or e-mail him at Ken.Drenon@mdc.mo.gov.



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ANOTHER FROZEN DINNER?

This American robin (*Turdus migratorius*) rests in a hawthorn tree following a December snowstorm. Many robins spend the winter in Missouri feeding on wild fruits of eastern red cedar, dogwoods, holly and many ornamental fruits that stay on the bushes during much of the winter. They are often seen feeding on fruit along with eastern bluebirds, cedar waxwings, northern mockingbirds and other frugivores (fruit-eating birds). This photo was taken by Lindsey Wight of Fenton.

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Shawn Cunningham

Humanity *for* Habitat

Master Naturalist volunteers ensure the future of Missouri's natural resources.

by Ginny Wallace and Bob Pierce, photos by Cliff White

Early on a Saturday morning at a remote site along the Missouri River, a small group of people talk quietly among themselves. A few more people arrive and then everyone sets to work. Some begin cutting cedars, while others drag large logs through the mud.

This is not a commercial work crew. Instead, it is a group of Missouri Master Naturalists who have set aside the day to install turtle basking logs and to place fish-attracting structure in a scour hole along the Missouri River in the Big Muddy National Fish and

Wildlife Refuge.

The Missouri Master Naturalist program is a community-based, adult, natural resource education and volunteer program sponsored by the Department of Conservation, the University of Missouri



Above: The Nature Conservancy's Doug Ladd (left) teaches participants about lichens.
Right: During a field day, participants learned about Missouri River management and habitat.





“It’s the chance of a lifetime to get professionally educated by authentic, real-life foresters, naturalists, conservation educators, wildlife biologists, herpetologists...doing things you’ve only ever seen on National Geographic specials.” —Leslie Limberg of the St. Charles Confluence Chapter



Volunteers learn to identify a variety of plant life, including lichens.

Extension and the MU School of Natural Resources. The mission of the Master Naturalist program is to engage Missourians in the stewardship of our state’s natural resources through science-based education and volunteer service.

Ask Master Naturalists, and they might offer somewhat different descriptions of the program. Barbara Lucks of Springfield describes it as “an opportunity to learn, work with like-minded folks, and provide service back to my community.”

Leslie Limberg of the St. Charles Confluence Chapter says, “It’s the chance of a lifetime to get professionally educated by authentic, real-life foresters, naturalists, conservation educators, wildlife biologists, herpetologists, etc., and then to become a part of their network of wildlife support, doing things you’ve only ever seen on *National Geographic* specials.”

Participants become Certified Master Naturalists by completing a 40-hour course on Missouri natural history, natural communities and wildlife management, and natural resource interpretation. They also must contribute 40 hours of conservation-related volunteer service and complete an additional eight hours of advanced training within a year. Master Naturalists retain their certification by annually contributing 40 hours of volunteer service and taking eight hours of advanced training.

People are drawn to the Master Naturalist program for a variety of reasons. For Cindy Craig of West Plains it was her grandson’s questions about the North Fork River.

“His questions and young eagerness to learn,” she said, “impressed upon me one important fact: I didn’t have answers to any of his questions. That bothered this grandma!”

Most participants want to learn more about Missouri’s rich natural history. The 40-hour course covers a wide variety of topics, including basic ecological concepts, Missouri’s eco-regions and ecosystems, wildlife population and natural community management, rural and urban conservation issues, plant and animal identification, and much more. Special attention is focused on local ecosystems.

Field sessions are an important part of the training. Instead of a lecture about the Missouri River in a classroom, participants take to the river in boats. Class members learn forest ecosystem concepts by comparing the size and age of trees on a north slope with those on a south slope, and they learn about plant diversity in a prairie by counting the number of different species in a plot.

Courses take 9-12 weeks to complete. Sessions typically are held once during the week, usually in the afternoon or evening. There are also several Saturday field sessions. It’s a time-intensive experience.

“The initial training can be demanding on people with busy schedules,” said Wrandi Thomas, a Master Naturalist who lives in Webb City, “but rewarding throughout the process.”

John Vandover of the St. Charles Confluence Chapter said he became interested in the program because he believes in the importance of volunteer service.

“I’ve always been an avid hunter, fisherman and great lover of the outdoors,” he said. “Preserving, protecting and restoring our natural resources have always been very important to me. We are ordinary people who are committed through volunteer service. And, we need to develop a large, very active cadre of citizen naturalists who can make an impact across our state.”



Bryan Hopkins from the Missouri Department of Natural Resources (sitting on the far right edge of the boat) speaks to a group of participants about Missouri River management and habitat during a field training day.

Master Naturalist service projects run the gamut from collecting, cleaning and planting seeds in a prairie restoration area to conducting toad and frog surveys, from planting rain gardens to developing and presenting programs.

Master Naturalist Eleanor Mitter of Columbia, an early-childhood educator, developed the Nature Detectives program for preschoolers and their parents. She offers the program during the summer at Rock Bridge Memorial State Park through the Friends of Rock Bridge.

The Confluence Chapter created a rain garden at the Lewis & Clark Boathouse in St. Charles. The garden, located in a former construction dump site, features plants Lewis and Clark might have seen in Missouri on their expedition. The Chapter is working with a local education consultant from the Conservation Department to develop information

on the garden that will be incorporated into the many school programs conducted at the Boathouse.

Members of the Boone's Lick Chapter worked with the Friends of Big Muddy to complete a butterfly and moth survey at the Overton Bottoms unit of the Big Muddy Fish & Wildlife Refuge. Among the finds was a regal fritillary, a species of conservation concern not documented from that part of the state. Their efforts contributed to a checklist for area visitors.

Become a Master Naturalist

Master Naturalists are organized into local chapters. Visit www.monaturalist.org for more information and to find a chapter near you. The first step to becoming a Master Naturalist is to enroll in the 40-hour course. Courses are usually offered once a year by chapters, and course fees range from \$75 to \$100. Classes are filled on a first-come, first-served basis and usually fill quickly.

Missouri Master Naturalist is a new program, and chapters are added each year. New chapters are started by members of a community who want to play an active role in making a difference in their local natural resources. Contact your local MDC or MU Extension office for more information on the chapter application process, or visit www.monaturalist.org to download the application for chapter charter.





Master Naturalists learn about wildflowers from Missouri Department of Conservation Botanist Tim Smith (left).

Value of Volunteering

As these examples illustrate, volunteer service projects provide educational opportunities as well as benefit many agencies and organizations in the members' communities. Local partnerships are an important part of the program. Organizations and agencies that share a resource conservation mission support local chapters in a variety of ways. In return, they receive volunteer service.

Camp Brim Shire, a non-profit camp that serves disabled and disadvantaged youth, receives help from the Meramec Hills Chapter of Master Naturalists. Camp Director and Master Naturalist Richard Hashagen said chapter members assist clients during weekly fishing outings, and they have helped create a Braille trail for visually impaired campers.

The Wildcat Glades Conservation and Audubon Center is the beneficiary of a wide variety of volunteer activities provided by the Chert Glades Naturalists Chapter in Joplin.

The Conservation Department also benefits because volunteers help combat invasive species, assist with prairie restoration, conduct wildlife surveys and get involved with conservation education.

Being a Missouri Master Naturalist requires a real commitment of time and effort. Not everyone can fit such a commitment into their already busy lives, but for those who stick with it, the rewards are many.

Connie McCormack of the St. Charles Confluence Chapter said, "This is the first program I've been part of that has the potential to leave something of what I value behind when I am gone."

Although a full-time working mother, Wrandi Thomas looks forward to the monthly meetings and projects. "The wonder of children has to be the best part," she said. "They

really listen and have a curiosity that some adults miss out on."

Celeste Mazzacano of Columbia stays involved because it gives her the chance to keep learning new things, and it fits well with her personal values.

"And, it's proactive," she added. "The rain forests are disappearing, the glaciers are melting...What can one person do? A lot of people use that as an excuse to stay apathetic or uninformed, but if everyone out there planted a few native plants, yanked out a few invasives, created a few square feet of habitat, educated a few more people about the effect of impervious surfaces on urban streams, put up a few bat houses, cleaned up a few hundred yards of streams, dumped their unused crayfish bait back into the same creek they took them out of, things would be a whole lot better than they are."

For Leslie Limberg of the St. Charles Confluence Chapter being a Master Naturalist is a way to preserve the future by carrying on a legacy of the past.

"Starting when I was 12 or so," she said, "I regularly went bird hunting with my dad. The out-of-doors became my refuge. Walking in the tall grass I could 'vanish' in the face of something much greater than myself. The Master Naturalist program is a continuation of Dad's legacy." ▲

*"This is the **first** program I've been part of that has the potential to **leave something of what I value behind** when I am gone."* —Connie McCormack of the St. Charles Confluence Chapter



Master Naturalists learn about aquatic invertebrates from Missouri Department of Conservation Stream Biologist Mark Van Patten (second from left).





SAFETY

in Numbers

by Bob Staton

***The Missouri Hunter Education Program celebrates
50 YEARS and 1 MILLION graduates.***



One-millionth hunter education student Sam Enright, from Wildwood, with his hunter education instructor, Kevin Dixon, from the Union area.

February 2007 marks the 50th anniversary of hunter education in Missouri. Along with that anniversary, the Missouri Hunter Education Program is recognizing its 1,000,000th graduate, a milestone that few states have reached.

Since 1988 Missouri made hunter education a requirement for purchasing a firearms hunting permit, the hunting accident rate in Missouri has been reduced by almost 70 percent.

For More Information

About 30,000 people attend more than 1000 hunter education courses annually in Missouri. To find a course near you, or for more information on hunter education, contact your local conservation office (see page 1 for regional office phone numbers) or visit the Missouri Department of Conservation Web site at www.missouriconservation.org

Hunter education courses cover such topics as:

- ▲ Firearm safety in the field and in the home
- ▲ Hunter safety
- ▲ Hunter responsibilities
- ▲ Hunting skills
- ▲ Basic wildlife management
- ▲ Hunting regulations
- ▲ Hunting traditions and ethics
- ▲ Hunting equipment

Volunteer support

Training one million students is a huge task. So how did the Department of Conservation manage such a program? The answer is volunteers. Conservation agents and outdoor skills specialists have recruited and trained volunteer hunter education instructors for most of the 50-year history of hunter education in Missouri.

Volunteer instructors played an important role in conducting classes and recruiting students during the first 30 years. Classes were held in schools and in conjunction with Scouts, 4-H, and the Jaycees. There was no requirement to take hunter education in Missouri at that time, but several other states did require proof of the training to purchase a hunting permit. Missouri hunters traveled to other states to hunt, so hunter education became more of a priority. By the 1980s, Missouri was training 12,000 to 15,000 hunters annually.

Volunteer instructors donated their time and resources to help hunters of all ages complete the hunter education requirement. They believed in hunting and wanted to do their part to give others the opportunity to hunt, and to do so safely and responsibly.

The instructors came from all walks of life. They included teachers, factory workers, farmers, law enforcement officers and others, but no matter what their profession, they were all hunters with a passion for sharing this great outdoor activity with others. The hunter education program continues successfully today because that passion is still alive in our volunteer instructors.

Education Regulation

In 1987, the Conservation Commission instituted a new regulation for 1988 that said hunters born on or after January 1, 1967, must successfully complete a hunter education course prior to purchasing any type of firearms hunting permit. The number of hunter education students trained in 1987 was more than 37,000. And in 1988, the first official year of the new hunter education regulation, more than 64,000 students took the course.

In 1990, Missouri's hunter education program certified its 500,000th student. Ryan Laughlin, a young man from Grain Valley, was certified by instructor Jack Rose of Independence. Ryan stills lives and hunts in the Grain Valley area. In December 2006, the one-millionth student graduated from the program. Samuel D. Enright of Wildwood was certified by instructor Kevin Dixon of Union. It took 33 years to certify the first 500,000 hunter education students and just 16 years to certify the next 500,000. Both the program and its effectiveness have grown dramatically over the years.

Keeping Current

So what will the next 50 years hold for the Missouri Hunter Education Program? Volunteer instructors will remain the heart of the program, and though the curriculum might change, the message will remain safety, responsibility and ethics. We might also see new methods of teaching, such as using the Internet for a portion of the course. Hopefully, the next 50 years will see advances in education, research and equipment that will help make hunting accidents a thing of the past, but there will still be a need for hunter education.

Training hunters has always been a process rather than a product. We should never assume we know all that we could. Every time we pick up a firearm and go afield, we learn something. Hunter education serves to provide a foundation or framework on which to build a lifetime of learning and a lifetime of enjoyment. ▲

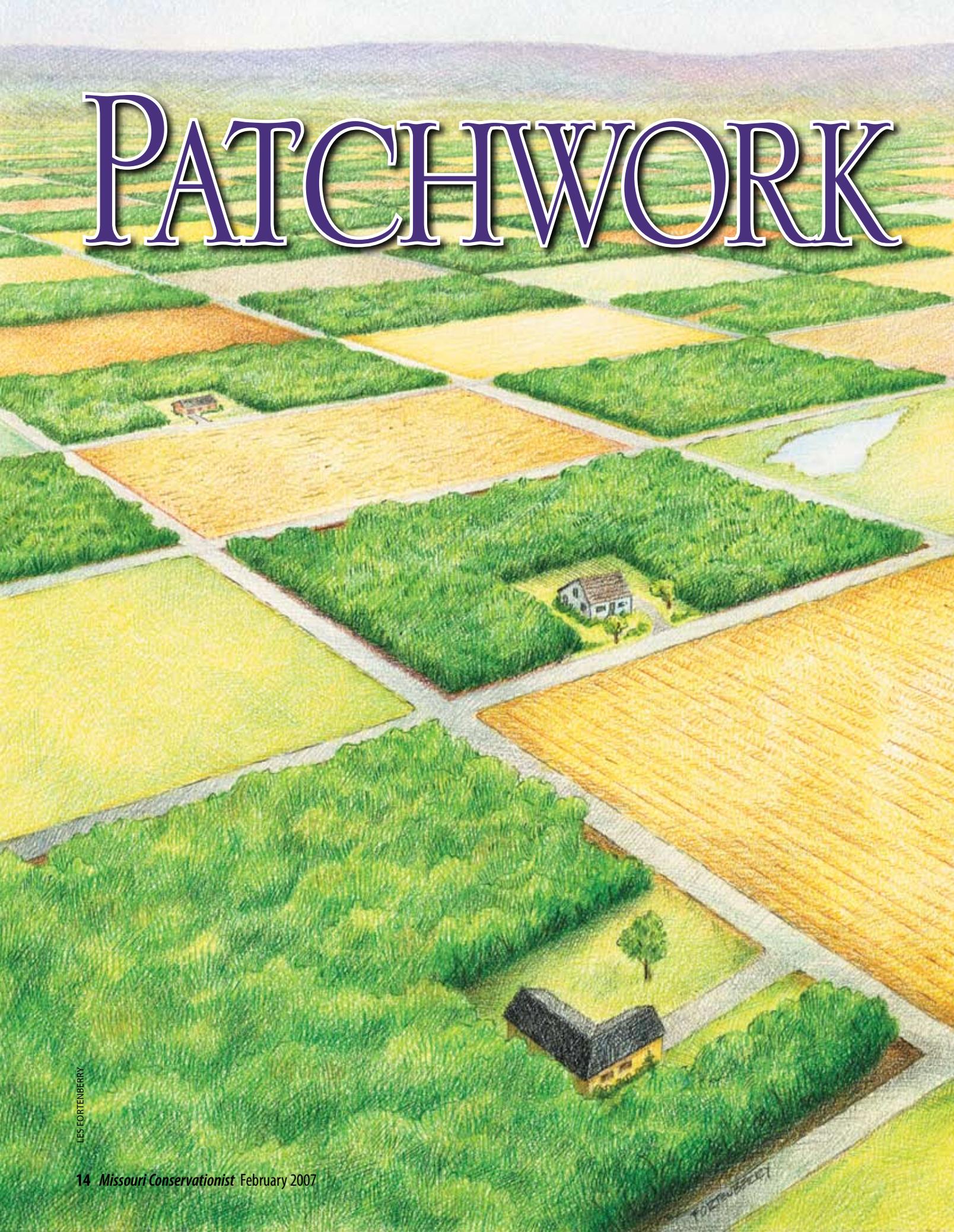
Hunter Education Highlights

- ▲ Some Department of Conservation agents began to teach hunter education on their own in the early 1950s, and requests for the courses increased.
- ▲ In 1956, the Department's Protection Division assembled a committee to draft a hunter education program. The Conservation Commission voted to make hunter education an official Department program at their February 1957 meeting. The voluntary course began that same year.
- ▲ On January 1, 1988, Missouri's mandatory hunter education law went into effect. This law required that anyone born on or after January 1, 1967, must successfully complete a hunter education course prior to purchasing any type of firearms hunting permit. During 1988, 64,000 students completed Missouri's hunter education course.
- ▲ In 1990 the 500,000th hunter education student was certified.
- ▲ 1993 saw the minimum age of 11 established by regulation for becoming hunter education certified.
- ▲ December 2006 saw the 1,000,000th student certified in Missouri's hunter education program.
- ▲ February 2007 marks the 50th anniversary of Missouri's hunter education program.



Ryan Laughlin (right) was the 500,000th hunter education student in 1990. His instructor was Jack Rose (left). Ryan was a hunter education student in Grain Valley. He still lives there and is an avid hunter.

PATCHWORK

A detailed illustration of a patchwork landscape, likely a rural area in the Midwest. The scene is composed of numerous rectangular fields in shades of green, yellow, and orange, separated by a network of grey roads. Small, simple houses with dark roofs are scattered throughout the landscape. The perspective is from an elevated position, looking down at the fields and roads. The overall style is a colorful, textured drawing.

LES FORTENBERRY

FORESTS

Neighbors unite for maximum wildlife and timber value from their forested land.

by Frances Main



Cedar waxwing



White-tailed deer



Cottontail rabbit

NOPPadol PAOTHONG PHOTOS

MISSOURI'S FORESTS ARE GETTING smaller, but there are more trees in the state than ever before.

That seems like a contradiction, but it is exactly what decades of inventories of Missouri's forests indicate. What's more, this seeming paradox presents a growing challenge to foresters who manage the state's woodlands, and to citizens who enjoy seeing healthy stands of timber on their property.

How can forests be smaller when there are more trees? The amount of land covered by forest in Missouri is increasing. Forest inventories show there were 12.9 million acres of forest land in 1972 compared to 14.5 million acres in 2005.

However, the size of the average forest plot in Missouri has gone down. This shrinkage is the byproduct of the "suburbanization" or, more accurately, the "semi-ruralization" of Missouri.

It's not the amount of forested land that's shrinking, but the size of the forests.

Old farms and pasture lands are being subdivided into smaller tracts. Everyone, it seems, wants their own little piece of land that they can build their house on and call their own. The result is that the number of Missouri landowners continues to increase, while the average size of property owned by individuals decreases.

Suburban or rural "homesteads" usually range between 3 and 20 acres. This size range reflects the need for at least 3 acres for a septic system in most outlying subdivisions.

Missouri is not the only state in which this shift to smaller forests is occurring. A nationwide poll in early 2006 indicated most Americans are willing to commute further to their job in order to live on their own land.

The Challenges

The Missouri Department of Conservation owns less than 3 percent of the forested land in Missouri. Nearly 85 percent of the forested land in the state is privately owned. This means that to really have an impact on Missouri's forests, the Department's foresters need to work with private landowners, includ-

ing the increasing number of those who own less than 20 acres.

According to Missouri Department of Conservation Forest Management Chief Mike Hoffmann, forest management on small acreages is sometimes difficult. "When managed as isolated tracts they are typically not sufficient to support functioning forest communities and associated wildlife," he said.

Smaller forests present two primary challenges: getting products out of the forest in a sustainable way and creating or sustaining wildlife habitat and ecosystem health.

In large forests, sustainable harvesting can be accomplished by rotating harvests throughout the property. A typical plan would call for harvesting 10 to 20 percent of the forest at a time, allowing 15 to 20 years of regrowth before harvesting an area again. This allows the forest to continually provide a good yield.

Small acreage forests, however, do not produce enough wood to make rotational harvesting feasible. Landowners often face an all-or-nothing predicament. If they want to realize some monetary return from their large, old trees, they probably need to clear-cut the entire property, but that means they lose the beautiful forest that they moved out in the country to enjoy.

Partial harvests usually don't work because loggers can't make enough money to pay for fuel and equipment costs.

"Moving from one little job to another just costs too much in gas and time," said Certified Logger Travis Yake. "If it's close to another job it's OK, or if the volume and quality is there. I have harvested off 5 acres before, so it can happen. It's just rare."

Also deterring the logging of small acreages are the large number of fences and structures usually present. These force loggers to spend more time cutting each tree so that it will not damage anything when it falls, and time is money.

Partnering for Wildlife

Small landowners, however, can band together with their neighbors to coordinate wildlife habitat plans that cross fences. You might



Gray squirrel



Bobcat



Northern cardinal

meet with nearby property owners to work out an overall plan, or you could just look around to see what's missing in the neighborhood wildlife habitat mix and try to provide that element.

If your neighbors have open fields and mature timber, for example, you might manage for a younger, brushy forest that provides a necessary transition zone of small, brushy plants. This can be accomplished by removing the larger trees from field borders or by planting shrubs about 30 feet out into an open field.

"If you get six or seven landowners with 10–25 acres, each working together," says Department Wildlife Management Biologist Brad Jump, "that's plenty of land to manage for almost all wildlife found in Missouri."

Partnering with your neighbors also opens up the opportunity to have loggers harvest some of your trees.

You may not have enough wood volume to attract a logger yourself, but being able to combine several small wood harvests on adjacent tracts may make it worth a logger's while to conduct a harvest.

Even though Missouri's forests are getting smaller, there are still plenty of ways to manage and improve the natural resources on them. It just takes a new approach to management, one that involves neighbors and partners.

You can count on the Department of Conservation to be a good partner. If you own acreage—large or small—and want to improve its value, health or beauty through conservation practices, just call your local Department office. They will be glad to help you get the most from your property (see page 1 for a list of regional office phone numbers). ▲

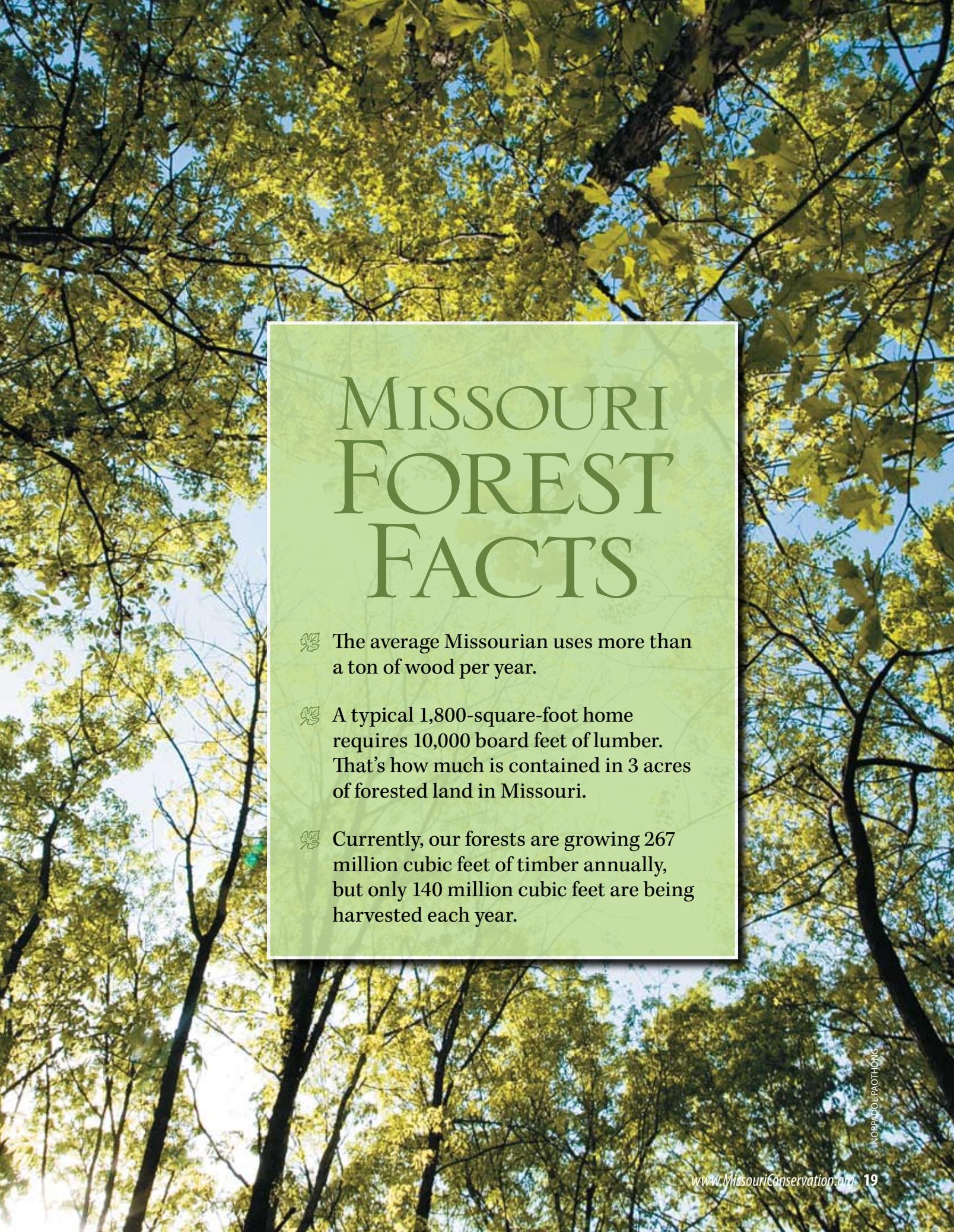


CLIFF WHITE

Why You Can't Sell That Tree

People are often surprised to find that it's not easy to find a logger to buy a big tree in their yard. They are even more surprised when they learn that they may have to pay an insured arborist to cut down the tree. There are good reasons why loggers might not be interested in making a deal for your tree.

- ▲ Trees growing in the open, away from competition, often are less valuable as lumber because they spread out instead of growing tall trunks.
- ▲ They might lack a permit that allows them to conduct business within the city limits.
- ▲ They don't want to assume the risk of possibly damaging houses, fences, power lines or pavement.
- ▲ They may not be able to make money by transporting equipment and personnel to cut down a single tree.
- ▲ They might not have the equipment to clean up the mess properly.



MISSOURI FOREST FACTS

- leaf The average Missourian uses more than a ton of wood per year.
- leaf A typical 1,800-square-foot home requires 10,000 board feet of lumber. That's how much is contained in 3 acres of forested land in Missouri.
- leaf Currently, our forests are growing 267 million cubic feet of timber annually, but only 140 million cubic feet are being harvested each year.

“One fish two red

We almost lost our biggest fish, but Missouri’s lake sturgeon are making a slow comeback.

by Travis Moore, photos by Noppadol Paothong



A small lake sturgeon “porpoises” at the surface. This activity has been observed during all life stages of lake sturgeon. Large adults do it right before spawning.

fish fish blue fish”





Above: Fisheries Management Biologist Travis Moore (right) and Western Illinois State University graduate student Mark Miller preparing to weigh a 15-pound lake sturgeon.

Right: Fisheries Management Biologist Travis Moore and graduate student Mark Miller removing lake sturgeon from a holding net.



Most of us recognize “One fish two fish red fish blue fish” as the title of a popular children’s book by Dr. Seuss, but what does Dr. Seuss have to do with conservation?

It really isn’t that much of a stretch to link the two. Animals play prominent roles in many of Dr. Seuss’s stories, and in his book *The Lorax* a group of animals is pushed to near extinction as their habitat is destroyed.

This article is about lake sturgeon, a fish that was almost completely eliminated from Missouri waters because of habitat loss, pollution and overharvest. By 1910, catches of lake sturgeon were rare in Missouri.

Lake sturgeon are ancient-looking fish that feed primarily on insects, although they will sometimes eat fish and crayfish. Their mouth is a short, toothless, retractable tube that they use to suck food from the river or lake bottom. Their body is protected by numerous bony plates, each having one or more small—but sharp—raised spines.

The species is Missouri’s largest and longest-living fish. Lake sturgeon more than 100 years old and weighing more than 200 pounds are occasionally caught in several northern states and Canadian waters.

Lake sturgeon were listed as endangered in Missouri in 1974, thus protecting them from all harvest. The Department of Conservation then worked out a long-term plan that included a stocking program to help this species rebound. The first fingerlings were stocked in the mid-1980s. Lake sturgeon don’t begin reproducing until they are nearly 20 years old. After that, they only spawn every three to seven years.

As part of the long-term recovery effort, fisheries biologists have been catching and tagging fish with transmitters to track their movements and to help learn more about what habitats they prefer, what their home range is and where they will go to spawn.

Touching on Transmitters

Radio and ultrasonic transmitters are commonly used in fisheries work. Radio transmitters work like miniature radio stations. Each emits a different and identifiable signal. The transmitters we use are small and are powered by a C-cell battery encased in epoxy. In most cases, we have to be within a half-mile of the fish to pick up their signal.

To hear the signals, biologists use a special receiver that works just like a radio. If we want to listen for a specific fish, we simply turn the dial to its transmitter’s unique frequency.

Our receivers also include a feature that allows us to scan for all signals. The receiver stops on each fish’s

frequency for several seconds, then moves on to the next one. This allows us to listen for many fish at one time.

Ultrasonic receivers emit a sound signal, rather than a radio signal. We use special listening devices placed in the water to hear these signals. All of the ultrasonic transmitters we use are on the same sound frequency, but the rhythm of the pulse is different. This allows us to listen for many fish at one time, but still allows us to identify individual fish as we get closer to them.

Where Did Goober Go?

Rather than always referring to them by number, staff working on this project sometimes name lake sturgeon tagged with ultrasonic transmitters after characters that appear in the books of Dr. Seuss. Thing One, Thing Two, and the Lorax are just a few of the names used. Radio-tagged fish are named after characters from the old *Andy Griffith Show*. Barney, Opie, Aunt Bea and their friends have been teaching us a lot about the lives of lake sturgeon.

Goober, a 23-pound male we caught and tagged just south of Hannibal in late March 2005, has been an especially interesting fish to follow.

After tracking him for a little over a week, he disappeared. Although we searched for him nearly every day, we didn’t find him until 10 days later. He’d moved 18 miles downriver, to the town of Louisiana. Then, for some reason, he decided to head back upstream.

Over the next six days we tracked him for another 80 miles as he made his way to Keokuk, Iowa. During that time he navigated around submerged rock dikes, through the fishing lines of shoreline anglers, and passed through three dams that break the river into large flowing pools.

This upstream movement couldn’t have been easy for Goober. During most of the year, it’s almost impossible for fish to go upstream through a dam. However, when the river is at or near flood stage, dam gates are raised. Although the water rushing through the gates is fast and turbulent, fish can dash through the gates with a burst of energy. Goober must have really wanted to go upstream to have passed through three dams.

He’s not likely to go any further upstream than Keokuk, though. The only way to move past the hydroelectric dam there is to enter a lock, a specially designed chamber that helps river boat traffic navigate around the dam. If Goober enters the lock and travels farther upstream, we might have to call for help from other states to help track him.

What Happens Next?

The initial phases of this particular project will end in 2007. We plan to continue to track our tagged fish at



least until the batteries on the transmitters go dead a few years from now. Future work may include identifying habitats used by smaller fish, identifying the characteristics of chosen spawning sites and tracking fish in the Missouri and lower Mississippi rivers to see what habitats they use there.

In the meantime, the Department of Conservation will continue to stock fingerling fish to bring their numbers up. In the 22 years since stocking began, we have released almost 300,000 lake sturgeon into our big rivers. This sounds like a lot, but amounts to only one fish per acre of water. Studies from other populations have shown that it may take a minimum of three fish per acre to restore the lake sturgeon population.

Ultimately, we hope to find that our stocked fish are reproducing and that their offspring are surviving. This would allow us to discontinue stocking and should eventually allow for a limited recreational harvest.

What If I Catch One?

Lake sturgeon are protected in Missouri, which means that all fish should be returned to the water unharmed immediately after being caught.

You may notice an external tag identifying the lake sturgeon as a fish marked many years ago. You might also see a wire antenna protruding from the fish's belly, which means it is a radio-tagged fish. Do not try to remove these objects. Simply note where and when you



Above: Temporary employee Stan Buxman checks a juvenile lake sturgeon for a coded wire tag (CWT). Most lake sturgeon in Missouri were stocked by the Missouri Department of Conservation. Before they were released, a 1/8" long CWT was embedded in the fish's flesh. The blue wand works like a metal detector, but is much more sensitive.
Left: Graduate student Mark Miller listens for radio-tagged fish using an external speaker.

caught the fish and approximately how long it was and contact your local Conservation office (see page 1 for a list of regional office phone numbers).

If you catch a lake sturgeon that weighs more than 20 pounds or is longer than 48 inches, record the date and location of the catch and contact your local office as soon as possible.

We expect Missouri's lake sturgeon population to continue to recover. We are already off to a great start and are learning more about this unique species every day. With the continued support of Missouri's citizens, we will never again have to worry about the loss of our biggest fish, and Dr. Seuss's *Lorax* will remain just a story about what could happen. ▲

Adopt-A-Sturgeon



Would you like to learn more about Missouri's lake sturgeon? Would you like to receive more information about Goober, Lorax, and the other sturgeon we are following? Are you a teacher interested in sturgeon lesson plans for your students?

If you answered yes to any of these questions, contact the Missouri Department of Conservation office in Hannibal at 573/248-2530. Additional information is available about lake sturgeon on the Missouri Department of Conservation Web site at www.missouriconservation.org.





Regulations

reflect Missourians'
CONSERVATION COMMITMENT

by John Smith

Missourians value the state's forests, fish and wildlife. To ensure these resources are protected, each year the Regulations Committee reviews the *Wildlife Code* of Missouri. Also each year, the public, as well as Department of Conservation staff, bring proposed changes for the committee to review.

During the review process, the committee researches the effects of the proposed regulation changes. Information reviewed by the committee often includes costs to the taxpayers, effects on wildlife populations, user group surveys, public comments and feasibility studies. When research shows a change could improve management of a species or provide more opportunities for Missourians to enjoy the outdoors, a proposed regulation change is sent to Director John Hoskins. If he approves the change, he submits the proposal to the Conservation Commission, four citizens appointed by the governor. If passed by the Commission, the proposed changes are filed with the secretary of state and published in the Missouri Register, which can be found at <http://mosl.sos.state.mo.us/moreg/moreg.htm>.

The filing begins the 30-day public comment period. If no comments are received, the final regulation is filed and becomes effective either 30 days after publication in the *State Code of Regulations* or on the date specified in the proposal. When comments are received, the Regulation Committee reviews the proposal. Based on the public's comments, the Commission may decide to drop, modify or implement the regulation.

To take advantage of the latest breeding statistics, population surveys and harvest data from the previous hunting season, some season dates and limits can become effective in a shorter time frame. In rare circumstances, emergency rules can become effective 10 days after filing with the secretary of state.

Letters, e-mails and phone messages from Missourians concerning regulation changes are shared with the Regulations Committee. Not every suggested

change can be made, but all suggestions are carefully reviewed. If you would like to see what changes are being considered, go to www.missouriconservation.org/regs/agenda/.

Last year's review resulted in the following:

Fishing

▲ Joachim Creek from the Highway V bridge to the Highway A bridge in Jefferson County now has a length limit of 15 inches for all black bass and a daily limit of one smallmouth bass. These restrictions will help maintain a quality smallmouth bass population as fishing pressure increases in this watershed.



Restrictions on length and daily limits help improve bass fishing opportunities in streams with increased fishing pressure.

- ▲ Snagging, snaring and grabbing no longer are allowed for catching shovelnose sturgeon. This will help protect these fish that are often in high demand for their eggs.
- ▲ A trout permit is no longer needed to fish in Stone Mill Spring Branch in Pulaski County, unless you want to keep a trout. This regulation change was requested by the Natural Resources Branch of Fort Leonard Wood to allow more fishing opportunities.
- ▲ Bighead and silver carp are exotic nuisance species that have become common in some large rivers in Missouri. To discourage their spread to other waters, these two species may be used as dead or cut bait, but not as live bait.
- ▲ The winter catch-and-release trout season at the state's four trout parks has been expanded to four days, from Friday through Monday. Maramec Spring Park is now open daily during this season, which runs from the second Friday in November through the second Monday in February.
- ▲ Koeneman Park Lake in Jennings, Liberty Park Pond in Sedalia and Spur Pond in Kirksville will be stocked with trout this winter for catch-and-release fishing from Nov. 1–Jan. 31. For bait restrictions and other regulations for the Department's winter trout fishing

areas, see *A Summary of Fishing Regulations*, which is available at permit vendors and online.

Commercial fishing

- ▲ Illinois commercial fishermen must be licensed in Missouri if they want to fish and harvest shovelnose sturgeon from the Missouri portion of the Mississippi River adjacent to Illinois.
- ▲ To stay informed of exotic bait species that could adversely affect fishing in Missouri, live bait dealers must register annually with the Department.
- ▲ In the Mississippi River, only shovelnose sturgeon 24 inches to 32 inches in length may be taken by commercial fishing methods.

Hunting and fishing methods

- ▲ The atlatl, an historic hunting tool, may be used to take nongame fish following the same regulations as when gigging fish and to take small game. An atlatl is a rod or narrow board used to launch a 5-to-8-foot dart. The dart is launched by a throwing motion of the arm. The Missouri Atlatl Association presented the Regulations Committee and Conservation Commission with videos, demonstrations and other data showing how the atlatl works, its accuracy and the skills needed to use this primitive method.
- ▲ Darts used in hunting may not contain drugs, poison, chemical or explosives.

Hunting and trapping

- ▲ To provide more opportunities for hunters age 6 through 15, two youth seasons have been established. Oct. 27–28 will be the dates for the 2007 youth-only quail and pheasant seasons; however, the pheasant season will be held in the north zone only.
- ▲ Electronic calls and electronically activated calls may not be used or possessed while hunting species other than crows or furbearers.
- ▲ After discussions with fur dealers, hunters and trappers, the furbearers seasons have been shortened by 15 days. Bobcat pelts must be tagged by Feb. 15.
- ▲ The commercially manufactured breakaways used with cable restraints must be rated at 350 pounds.

Permits

- ▲ To help recognize the Missourians who are serving our country, the new \$5 Resident National Guard and Reserve Small Game Hunting and Fishing Permit provides a lower-cost option for these men and women to hunt and fish when they return home. To qualify for this permit, purchasers currently

The Department works closely with trappers and fur dealers to ensure that high-quality furs can be taken within the prescribed seasons.



Length limit restrictions on shovelnose sturgeon in the Mississippi River will allow commercial fisherman an opportunity to use this resource, while protecting the species.

must be, or have been in the previous 12 months, mobilized and serving on full-time active military duty in either the National Guard (in Federal Status) or Reserve forces. For an application form, go to <http://mdc.mo.gov/9213> or call 573/522-4115, ext. 3574. Allow 10 days after sending in your application for your permit to be delivered.

- ▲ The price of the Resident Cable Restraint Permit has been lowered from \$25 to \$10. Training is required to purchase this permit, and the new lower rate reflects the lower training costs.
- ▲ The surcharge for residents of states that charge significantly more for nonresident deer hunting permits than Missouri has been eliminated, but the cost of nonresident permits has increased.
- ▲ The Resident Fur Dealer's Permit has been lowered from \$300 to \$100, and the new Nonresident Fur Dealer's Permit is available for \$300.

General recreation

- ▲ To promote recreational use of the Missouri River, a new regulation allows boaters to camp at most riverside conservation areas on any suitable site within 100 yards of the river and moor overnight adjacent to camp (but outside the navigation channel) between April 1 and Sept. 30.
- ▲ On Blind Pony Lake Conservation Area, only Department-owned boats may be used.

Confined wildlife

- ▲ All Class I and Class II wildlife breeders must now maintain records of animals that have died, as well as ones that have been sold. This change was made to discourage people from turning dangerous and exotic animals loose.
- ▲ Hogs kept on big game hunting preserves must be enclosed in fences constructed of 12-gauge woven wire at least 5 feet high and topped with one strand of electrified wire. An additional 2 feet of such fencing must be buried and angled underground toward the enclosure interior. This change was made to keep hogs from escaping and becoming nuisances.
- ▲ Fences on big game hunting preserves cannot be cross-fenced into portions of less than 320 acres.

Clarification

- ▲ To ensure that lessees who help manage Missouri's private land have the same hunting and fishing privileges as resident landowners, the commission revised the lessee definition to include only those lessees who reside on and lease at least 5 acres of land in one continuous tract owned by others. Any member of the lessee's immediate household whose legal residence and domicile is the same as the lessee's for at least 30 days also may receive these privileges, which include no-cost deer and turkey permits to use on the leased land only. ▲



Trout park opener falls on Thursday

Thousands of Missourians look forward to March 1 with eager anticipation, because that is the day the state's four trout parks open for the catch-and-keep fishing season. The event's allure is partly due to the release it offers from cabin fever, partly because of its festive, sociable flavor and partly because the Department of Conservation stocks tens of thousands of keeper-sized rainbow trout in four trout streams in anticipation of the anglers' arrival.

Opening morning finds anglers lining the banks of Bennett Spring State Park (SP) near Lebanon, Roaring River SP near Cassville, Montauk SP near Salem, and Maramec Spring Park near St. James. They also line up at park stores to buy fishing permits, trout tags, bait and other fishing essentials. To beat the rush, it is a good idea to buy permits ahead of time.

Fishing permits are available from vendors statewide, or you can order by phone at 800/392-4115 or online at www.wildlifelicense.com/mo. You will pay an additional \$2 for the convenience of buying online.

Permits bought electronically are delivered by mail, and you must have a fishing permit in hand to buy your daily trout tag at trout parks. To ensure that you have your fishing permit in time, place orders at least 10 days before March 1.

For trout park information, visit www.missouriconervation.org/2852.

Wild Bird Club brightens lives

Feeding birds is the most popular wildlife-based activity in the United States, so Community Living, Inc., (CLI) of St. Peters decided to build a program around the activity, forming the Wild Bird Club. The club gets developmentally disabled adults involved in conservation and helps build conservation awareness in their communities.

The program began last November with bird feeders offered by the St. Charles location of Wild Birds Unlimited, a retail bird-feeding store. During a promotional event last September, the store gave customers a 20 percent discount on new bird feeders when they donated used feeders. Some of the used feeders went to the Wild Bird Club, whose members refurbish them and fill them with seed. Club members will give reports on their bird-feeding experiences at a meeting in May.

For more information about the Wild Bird Club and volunteer opportunities with CLI's Recreation Services program, contact CLI Recreation Services Manager Carolyn Weber, cweber@cliservices.org, 636/970-2800, ext. 3035.

KC QU chapter has scholarships

College students still have time to apply for \$1,000 scholarships from the Quail Unlimited Kansas City Chapter. The group awards several scholarships annually to college students majoring in wildlife management or related fields. For details, contact Dave White, 12012 West 150th Circle, Olathe, Kansas 66062-9410, phone 913/897-3822, e-mail kcqu/unltd@aol.com. Applications are due by May 1.

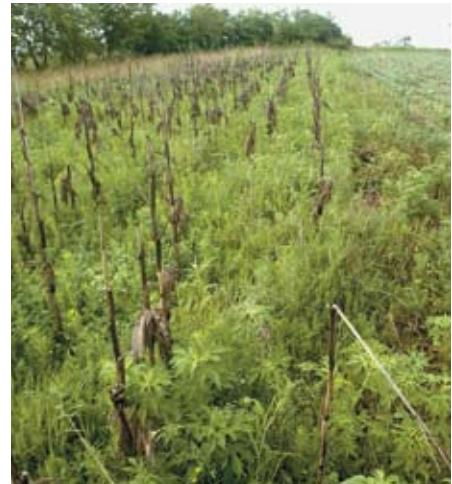
HABITAT HINT: Food plot success

Food plots can be an important element in a wildlife management plan. However, landowners need to look at the big picture when installing food plots to ensure maximum benefits.

Patches of corn, wheat, sorghum and other crops can help wildlife through the winter by providing high-energy food. The value of such plots diminishes dramatically, however, if quail and other wildlife do not have shrubby cover or open stands of native, warm-season grasses nearby. Quail seldom venture more than 70 yards from shrubby cover. Furthermore, brushy fencerows and other shrubby cover harbor an abundance of plants that produce high-nutrition foods, such as beggar-lice, ragweed and partridge pea seeds.

You also can increase the quality of shrubby or grassy cover by disking or burning fescue and brome grasses in fence lines and woody draws. Burning is also a valuable tool for keeping brushy cover open and productive for wildlife.

The Covey Headquarters, a quarterly newsletter designed to help landowners encourage quail and other wildlife on their land, is available online. Visit www.missouriconervation.org/7887 to access current and back issues.





Bill Holmes has benefited from the Conservation Security Program in many ways including an increased number of waterfowl in his area.

FARM BILL IN ACTION: CSP provides security in several ways

As Congress debates the next federal farm bill, you are likely to hear about crop price supports and food and nutrition programs. What you may not hear is how the farm bill affects soil, water, wildlife, fish and forests. Missouri landowners receive approximately \$150 million annually through farm bill programs for implementing conservation measures on their land.

When Bill Holmes enrolled almost all of his 1,800-acre farm in the Conservation Security Program (CSP), he became part of an effort to conserve national treasures. CSP is a volunteer program that provides financial and technical assistance to promote the conservation and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes on private working lands.

In Holmes' case, CSP helped pay for planting strips of native, warm-season grasses around some of his crop fields. These buffers catch soil that otherwise would be lost to erosion. In doing so, they also protect water quality and the plants, fish and other animals in streams. The strips also benefit wildlife, such as quail and rabbits, which find food and shelter in the grass.

In addition, Holmes through CSP, planted shrubs, to improve soil and water quality. The shrub plantings also provide wildlife conservation benefits.

Finally, CSP provides payments to Holmes for leaving some of his crops standing in fields throughout the winter. This high-energy food supplement helps wildlife survive cold spells.

The low, flood-prone nature of Holmes' farm makes it particularly well-suited for waterfowl conservation. A modest levee and water-control structures allow him to capture rainwater in the fall and winter, creating marshy habitat that ducks and geese adore. During dry spells, he pumps water onto the land. He does a little duck hunting himself, and he barter duck hunting privileges with friends and neighbors in exchange for things he needs, such as tractor driving.

"I have seen a big increase in the number of deer we are holding," said Holmes. "The additional flooded acres have brought an increased number of wintering waterfowl in the area. We had thousands of ducks and geese using the property last year."

CSP is administered by the Natural Resources Conservation Service. For more information about CSP, visit www.mo.nrcs.usda.gov and click on "Programs" or call the nearest USDA Service Center.

Proper pruning critical

It is not too late to prune trees before they break their winter dormancy. For Missourians whose trees were damaged by storms in the past year, doing the job right can help ensure the survival and vigor of landscape trees.

Ideally, pruning should be done a little at a time throughout trees' lives, creating desirable shapes and maintaining strong trunks and branches to prolong life. Drastic pruning can be detrimental to trees. Never remove more than one-third of the branches at one time. Dead or broken branches should be removed first. This must be done carefully to avoid causing more injury.

The most common kind of damage that occurs during pruning is torn bark. This happens when a branch is cut on its upper surface and breaks before the saw cuts all the way through. As the limb falls it pulls downward on the remaining bark, tearing into the limb or trunk below.

To avoid this, make three cuts, the first a few inches into the damaged branch's bottom surface a foot or two from its junction with the main branch. This stops bark tearing. Make the second cut a few inches above the first one, severing most of the limb and thereby taking its weight off the remaining stump. The final cut is just above the raised ridge of bark known as the collar. This cut should leave the bark collar intact. This collar eventually will produce bark to cover the wound.

For illustrations and more information about tree pruning, go to www.missouriconservation.org/7371. To find a forester or arborist for advice, contact the nearest Conservation office (see page 1 for a list of regional office phone numbers).

11th Annual Vulture Venture

Since 1996, the Shepherd of the Hills Fish Hatchery in Branson has hosted Missouri's most unusual wildlife viewing opportunity. This year's Vulture Venture will run from noon to 6 p.m. Feb. 24.

Vulture Venture focuses on the often misunderstood and highly beneficial scavengers. Indoor attractions include a live vulture from the Wonders of Wildlife Museum in Springfield, a video about vultures and vulture games, stickers and crafts. Naturalists will greet visitors outdoors with spotting scopes for viewing one of Missouri's largest vulture wintering roosts.

The event is a rare opportunity to see both black and turkey vultures in same location. Late in the afternoon, participants can watch vultures "kettling" as the big birds swoop in to roost for the night. The program is free and requires no reservations. For more information or directions, call 417/334-4865, ext 0.



Turkey Vulture

Outdoor Calendar

Hunting

	open	close
Coyotes	5/15/06	3/31/07
Crow	11/1/06	3/3/07
Furbearers	11/15/06	2/15/07
Groundhog	5/7/07	12/15/07
Rabbits	10/1/06	2/15/07
Squirrels	5/27/06	2/15/07
Turkey		
Spring	4/16/07	5/6/07
Youth resident only	3/31/07	4/1/07
Light Goose Conservation order please see the <i>Waterfowl Hunting Digest</i> or see www.missouriconservation.org/hunt/wtrfowl/info/seasons		

Fishing

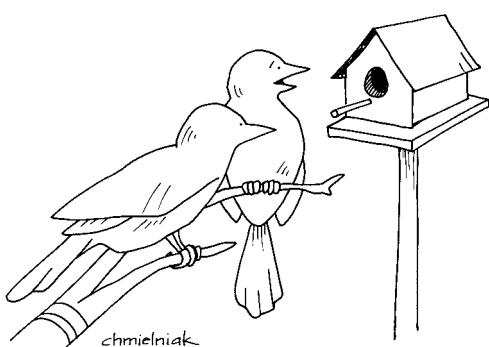
Black Bass (certain Ozark streams, see the <i>Wildlife Code</i>)	5/27/06	2/28/07
impoundments and other streams year-round		
Bullfrog	Sunset	Midnight
	6/30/07	10/31/07
Nongame fish snagging	3/15/07	5/15/07
Paddlefish	3/15/07	4/30/07
Paddlefish on the Mississippi River	3/15/07	5/15/07
Trout Parks catch and release	11/10/06	2/12/07
(Friday–Monday at Bennett Spring, Montauk and Roaring River and daily at Maramec Spring)		

Trapping

Beaver	11/15/06	3/31/07
Furbearers	11/15/06	2/15/07
Otters & Muskrats	11/15/06	see <i>Wildlife Code</i>

For complete information about seasons, limits, methods and restrictions, consult the *Wildlife Code* and the current summaries of *Missouri Hunting and Trapping Regulations* and *Missouri Fishing Regulations*, the *Fall Deer and Turkey Hunting Regulations and Information*, the *Waterfowl Hunting Digest* and the *Migratory Bird Hunting Digest*. This information is on our Web site at www.missouriconservation.org/regs/ and at permit vendors.

The Conservation Department's computerized point-of-sale system allows you to purchase or replace your permits through local vendors or by phone. The toll-free number is 800/392-4115. Allow 10 days for delivery of telephone purchases. To purchase permits online go to www.wildlifelicense.com/mo/.



"That's the house where I was born and raised...I remember it bigger."

Missouri Woodland Owners Conference

Anyone who owns forest land, this conference Feb. 23–24 is for you! The conference begins on Friday with an optional field day at the MU Horticulture and Agroforestry Research Center in New Franklin. There will be coffee and donuts from 8:30 to 10 a.m. Round-robin sessions will begin at 10 a.m. Participants will learn about basic tree identification, forest soils and timber stand improvement.

The Friday evening "Ask the Experts" at the Stoney Creek Inn in Columbia will provide you the opportunity to ask our panel of forestry professionals any questions on your mind and connect with other forestland owners.

The conference continues on Saturday at Stoney Creek with presentations on green certification, conservation easements, maps and technology, incentive and cost-share programs, and designing trails for recreation and property access.

Registration for the Friday field day and Saturday conference sessions is \$60; for the Saturday conference only it is \$50. A late fee of \$10 will be added to any registration received after Feb. 16. To register by phone, call Glenda Fry at the Missouri Forest Products Association, 573/634-3252.

AGENT NOTEBOOK

One of the most common questions

I encounter when talking about conservation rules and regulations is "Why?"

Most of the rules and regulations contained within the *Wildlife Code* fall into three basic categories. They protect wildlife, protect people or provide equal harvest opportunity.

Many regulations are designed to maintain healthy wildlife populations and to directly prevent wildlife from being exploited. These regulations protect wildlife during times of the year when they may be reproducing or caring for young. They limit the number that may be harvested and prohibit unfair harvest methods. Regulations relating to seasons, methods and limits are common examples of this category of regulations.

Other regulations protect lives and property. These regulations are designed with everyone's safety in mind. Some examples of this type of regulation include hunter-orange regulations, laws that prohibit the taking of wildlife from or across a public roadway, and shot-size limitations for turkey hunting.

In addition, we have laws to ensure that wildlife populations are maintained at levels where everyone will have an opportunity to enjoy them. Placing restrictions on the harvest and possession of wildlife helps to maintain high-quality hunting, fishing and trapping opportunities for everyone. Daily and possession limits for individual wildlife species are the most common examples of this category of regulations.

The next time you wonder "Why?" take a close look at the regulation. It is likely you will be able to place it into one or more of these categories.

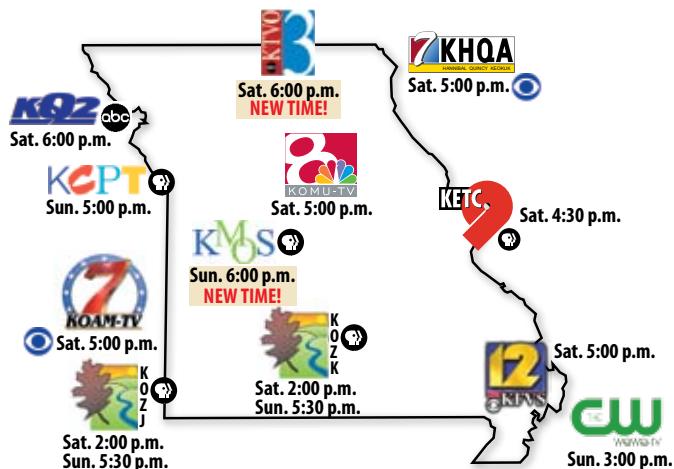
—Travis McLain, Barry County





Program Schedule

Television the way Nature intended!



For additional show information and video clips, be sure to check our Web site at <http://mdc4.mdc.mo.gov/tv/>.

SHOW SCHEDULE

Feb. 3 & 4—COLUMBIA BOTTOM

Discover the outdoors in many ways at any age.

Feb. 10 & 11—CAVES

Journey down under for some caving adventures.

Feb. 17 & 18—PIONEER FOREST

Relive the history and importance of Missouri's tall timber.

Feb. 24 & 25—MOLES

Get a close-up look at moles.

March 3 & 4—HUNTING

Travel the state throughout the year and catch the action as hunters pursue duck, squirrel and deer.

OTHER OUTLETS

(Previously aired episodes are also shown on the following)

Blue Springs CTV7
Branson Vacation Channel
Brentwood BTV-10 Brentwood City Television
Columbia CAT3
Columbia Columbia Channel
Greenwood/Lake Winnebago Billboard 7
Hillsboro JCTV
Independence City 7 Cable
Joplin KGCS-TV57
Kearney Unite Cable
Malden Ch 21
Maryland Heights MHTV-10
O'Fallon City Cable

Parkville GATV
Perryville PTV
Platte City Unite Cable
Poplar Bluff Poplar Bluff City Cable
Ste. Genevieve Ste. Genevieve Cable
St. Charles SC20 City Cable
St. Louis Charter Cable
St. Louis Cooperating Schools Cable
St. Louis City TV 10
St. Peters St. Peters Cable
Springfield MediaCom
Sullivan Fidelity Cable
West Plains OCTV

Meet Our Contributors



Originally from Texas, **Frances Main** began her career with the Department in 1990. She spends much of her free time working on her own tree farm. She is a John Wayne "fan" in the true sense of the word, and she enjoys her motorcycle, her dog and her church when not in the woods.

Travis Moore is a fisheries management biologist in Hannibal. He works on a variety of big-river issues, including shovelnose and lake sturgeon, freshwater mussels and fish habitat management. He spends his free time fishing and chasing game with his wife, Kathi, and two sons, Chance and Jacob.



Bob Pierce is the extension fisheries and wildlife specialist for the University of Missouri. He provides statewide leadership for the Extension's fisheries and wildlife education programs, including Master Naturalist. He lives near Columbia and enjoys outdoor sports, particularly bicycling and playing golf.



John Smith is an Assistant Director supervising the resource divisions of the Department and has been with MDC since 1980. He also chairs the Department's Regulations Committee. John and his wife Liz live in Moniteau County. He enjoys hunting, fishing, backpacking and horseback riding.



Bob Staton was the Outreach & Education Division field chief for the past four years. Prior to that, he was the Missouri hunter education state coordinator. An avid quail and pheasant hunter, he enjoys teaching his six grandchildren to hunt and fish. He retires in March after 29 years with the Department.



Ginny Wallace is the Department's Master Naturalist coordinator and a 27-year employee with MDC. She and Bob Pierce created Missouri's Master Naturalist Program in 2004. Ginny lives on a 47-acre farm in Cole County with her husband, Mervin. She enjoys helping others discover natural places in Missouri.



Opossums in Pursuit

The shy, secretive and nocturnal opossum is seldom seen in the open. It prefers to live in wooded areas, mostly near streams, and generally begins breeding in February.—Noppadol Paothong



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Missouri households*